Two-Hundred Days of Combat: the Division Staff During the Great War

A Monograph
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When the United States declared war on Kaiser Wilhelm's government on April 6, 1917, the U.S. Army underwent a profound growth and transformation to conduct combat operations against the German Imperial Army. Since the U.S. Army grew from 125, 000 men to over 4,000, 000, there was an increased requirement for capable staff officers, especially on division-level staffs, to assist commanders with directing combat operations. To address the major shortfall in capable staff officers, the American Expeditionary Forces (AEF), under the command of General John J. Pershing, developed a standardized staff organization, created the Army General Staff College in Langres, France, and expected staff officers to hone their skills while undergoing the trials of combat. This all contributed to the creation of U.S. division-level staff officers capable of synchronizing complex military operations on the Western Front of France and contributed to the Allied victory over the Central Powers by November 1918.

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Abstract

TWO-HUNDRED DAYS OF COMBAT: THE DIVISION STAFF DURING THE GREAT WAR, by Major Eric Hunter Haas, 65 pages.

When the United States declared war on Kaiser Wilhelm's government on April 6, 1917, the U.S. Army underwent a profound growth and transformation to conduct combat operations against the German Imperial Army. Since the U.S. Army grew from 125, 000 men to over 4,000, 000, there was an increased requirement for capable staff officers, especially on division-level staffs, to assist commanders with directing combat operations. To address the major shortfall in capable staff officers, the American Expeditionary Forces (AEF), under the command of General John J. Pershing, developed a standardized staff organization, created the Army General Staff College in Langres, France, and expected staff officers to hone their skills while undergoing the trials of combat. This all contributed to the creation of U.S. division-level staff officers capable of synchronizing complex military operations on the Western Front of France and contributed to the Allied victory over the Central Powers by November 1918.

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Acronym

AEF	American Expeditionary Forces
AGSC	Army General Staff College (the General Staff Course taught at Langres, France during WWI)
ASC	Army Staff College (the General Staff Course taught at Leavenworth before WWI)
BEF	British Expeditionary Force
COS	Chief of Staff
G-1	Personnel Officer
G-2	Intelligence Officer
G-3	Operations Officer
G-4	Supply Officer (only found at Corps and higher staffs)
G-5	Training and Schools Officers (found at Army Staffs and higher)
GSC	General Staff College
POW	Prisoner of War
SOL	School of the Line
WWI	World War I

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Chapter 1

Introduction

When war was declared there were only 200,000 in the Army. Two-thirds of these were Regulars, and one-third National Guardsmen who had been called to Federal Service for duty along the Mexican border. When the war ended this force had been increased to 20 times its size and 4,000,000 had served.

— Leonard P. Ayers, *The War with Germany*

When the United States Government declared war on Germany and the Central Powers on April 6, 1917, the U.S. Army was a small, frontier-oriented force without a standing, Regular Army division formation. The U.S. Army ranked seventeenth in the world in size as it prepared to face the German Army, who had an experienced military after three years of combat against French, British, and Belgian forces on the Western Front. By the war's end, nineteen-months later, the U.S. Army sent forty-two divisions to fight in France, with an additional twelve divisions formed in the United States awaiting movement overseas. This rapid growth required innovation in training and education to produce division formations capable of matching the capabilities of Kaiser Wilhem's experienced Imperial German Army.¹

The U.S. Army was unprepared for the type of combat it faced in the trenches in France. Prior to entry into World War I, the U.S. Army had fought a brief war with Spain over territories in Cuba and the Philippines in 1898, waged a successful counterinsurgency operation in the Philippines from 1899 to 1902, and conducted a cross-border operation against the Mexican bandit Pancho Villa in 1916. These previous conflicts displayed a different level of complexity at

¹ Leonard Ayres, *The War with Germany: A Statistical Summary* (Washington, DC: Government Printing Office, 1919), 25-26. This work by Leonard Ayres, derived from his work with the U.S. Army's Statistical Office, provided a statistical analysis of the American war effort during World War I.

the division and higher levels compared to operations in the Great War. The U.S. Army underwent a rapid organizational transformation to meet the threat faced with this new type war.²

Following the U.S. government's declaration of war, French Field Marshall Joseph Joffre traveled to the United States to discuss the integration of American forces into the Allied war efforts, as did a British delegation. One of the major issues presented to the American policymakers was the question of whether British and French forces "amalgamated" American soldiers into the European formations or if U.S. soldiers fought under a separate American command. General John J. Pershing, the commander of the American Expeditionary Forces (AEF), faced this question repeatedly during his tenure as commander. A major factor ensuring American forces fought under an American command was the U.S. Army's ability to field capable, division-sized formations rapidly.³

In addition to manning the division structures with soldiers, the U.S. Army needed to expand the officer corps and ensure the division's had staff officers capable of performing the tasks confronting them. To solve this shortfall in training, the U.S. Army employed a combination of techniques to train division staff officers, which included developing a standardized division-staff structure, the creation of a formal staff school in France, and the training of staff officers through the crucible of conducting operations during the war. These efforts produced U.S. divisions capable of waging complex, combined arms maneuver by the end of the war, and provided a major contribution to the overall defeat of the Central Powers.

² Brian McAllister Linn's work *The Philippine War, 1899-1902* (Lawrence: University of Kansas, 2000) provides some of the best background on the U.S. Army's counterinsurgency operations in the Philippines. John S.D. Eisenhower's book *Intervention! The U.S. and the Mexican Revolution, 1913-1917* (New York: W.W. Norton and Company, 1995) provides an excellent account of General Pershing's Mexican Punitive Expedition in 1916 against Pancho Villa.

³ John J. Pershing, *My Experiences in the World War* (New York: Frederick A. Stokes Company, 1931), I:30-33; John S.D. Eisenhower, *Yanks: The Epic Story of the American Army in World War I* (New York: Touchstone Books, 2001), 16-17.

In order to examine the development of division-level staff capabilities, this monograph will examine the efforts to build proficient division staffs and then conduct a case-study comparison of two divisions during their operations in France, the Second Division and the Eighty-Ninth Division. The Second Division, a Regular Army division, formed in France and consisted of a Regular Army brigade and a United States Marine Corps brigade. The division participated in stopping the German Spring Offensives in early 1918, continued operations through the Meuse-Argonne Campaign, and fought until the eventual armistice of Germany. The Eighty-Ninth Division, a National Army division composed of draftees from the Kansas, Missouri, South Dakota, and Nebraska, arrived later than the Second Division, but participated with them in the St. Mihiel and Meuse-Argonne Campaigns. As both divisions experienced similar conditions during the St. Mihiel and Meuse-Argonne Campaigns, they have a common basis for comparison. Through the examination of both a Regular Army and National Army division, one can assert how well the division organizations improved during combat operations in France.⁴

An examination of the U.S. Army's expansion and conduct of operations in France during the First World War will provide valuable lessons for potential future conflicts. Though the U.S. Army of 2012 is composed of an all-volunteer force, it is important to understand the lessons of how a small, volunteer force expanded rapidly through the Selective Service draft of soldiers, and successfully fought a large-scale, industrialized war against a determined enemy. The defeat of the Imperial German Army was not a foregone conclusion. The Allied victory in 1918 required the introduction of a capable, American force to break through the German

⁴ The Regular Army Divisions numbered 1 through 20, though only 8 Regular Army Divisions arrived in France by the war's end. The Regular Army Divisions were composed of Regular Army men, voluntary enlistees, and some draftees. The National Guard divisions numbered 21 through 42 and differed from the Regular Army in that the National Guard consisted of organized state militias called into national service. The National Army divisions numbered 72 to 92 and consisted of soldiers drafted into national service through the Selective Service Boards. The National Army divisions also contained soldiers from across multiple states. Ayres, *The War with Germany*, 25-26.

trenches to assist in collapsing Kaiser Wilhelm's government. That would only be possible through the development of division staffs capable of synchronizing, sustaining, and maneuvering forces.⁵

⁵ Though outside the scope of this study, Scott Stephenson's work *The Final Battle* (New York: Oxford University Press, 2010) provides an excellent examination of the final six weeks of the German Army and the collapse of Kaiser Wilhelm's government. He specifically examines the collapse of the German Army and the return of the German forces to their home stations following the Armistice in November 1918. His study highlights how the combination of Allied pressure through synchronized offensive operations in conjunction with the deterioration of the home front collapsed the German's will to fight.

Chapter 2

The Division Staff

American combat forces were organized into division, which, as had been noted, consisted of some 28,000 officers and men. These divisions were the largest on the western front, since the British division numbered about 15,000 and those of the French and Germans about 12,000 each.

— Leonard P. Ayres, *The War with Germany*

As the quote above highlights, the American combat division was a unique structure on the battlefields of France. The U.S. division's strength was over twice that of a French or German division and required a capable staff element in which to assist the commanders with command and control. Besides having a larger formation than its European counterparts, the US Regular Army's divisions also were not permanent formations prior to 1917. This required the US Army to quickly form divisions, corps, and army groups, and train them to a competency level equal to what France and Great Britain had three years to accomplish.⁶

Before the start of the Great War, the US Army's *Field Service Regulations* of 1905 viewed the regiment as the largest permanent formation during peacetime. Once the United States went to war, commanders grouped regiments into brigades, divisions, and larger-scale formations. The division consisted of three infantry brigades, a cavalry regiment, nine field artillery batteries, an engineer battalion, and then a collection of signal, medical, and logistic assets. The Army viewed a division as an organization that could operate independently and had a combined arms capability that integrated infantry, cavalry, and artillery units. Since the division

⁶ During the Punitive Expedition into Mexico in 1916, the U.S. Army deployed 48,000 Regulars and 111,000 National Guard soldiers along the Mexican border in the Southern District. The division structures were not still standing when the United States declared war in 1917. Edward Coffman, *The Regulars: The American Army*, 1898-1941 (Boston, MA: Harvard University Press, 2004), 199.

was not a permanent structure, the division headquarters consisted of officers detailed to the organization, once the War Department authorized the publishing of a table of organization.

In 1914, the then-Army Chief of Staff Major General Leonard Wood produced another version of the *Field Service Regulations*. This version of the *Field Service Regulations* underwent eleven revisions during the course of the Great War, as the War Department attempted to match the U.S. Army's operating doctrine to battlefield conditions in France. The 1914 version of the *Field Service Regulations* was not as descriptive as the 1905 version on the structure of divisions, but did highlight the combined-arms nature of the division and its ability to operate independently.⁸

When U.S. land forces arrived to France in 1917, the division formation was larger than the European divisions. General John J. Pershing directed the American division consist of two infantry brigades, composed of two infantry regiments each, a field artillery brigade, consisting of three field artillery regiments, three machine gun battalions, an engineer battalion, and a field signal battalion.⁹

A number of factors may have influenced the decision by General Pershing and the U.S. Army General Staff to adopt a large division formation. These factors included an acknowledgement by senior commanders that the U.S. Army possessed few officers with the experience to lead large formations, so having a larger division, but less of them, helped alleviate this problem. In addition, there was an idea that with the potential for high casualties it was more

⁷ Department of War, *Field Service Regulations* (Washington, DC: Government Printing Office, 1905), 11-13. The 1905 *Field Service Regulations* was the first Field Service Regulations produced by the US Army, incorporating ideas from the Spanish-American War; however, many of the organizations did not differ greatly from the informal organizations within the Union Army during the American Civil War. The Department of War had the authority to organize brigades and divisions, while the President of the United States had the authority for army corps and larger formations.

⁸ Department of War, *Field Service Regulations* (Washington, DC: Government Printing Office, 4 February 1916), 10.

⁹ Shipley Thomas, *The History of the AEF* (New York: George H. Doran Company, 1920), 43; and Coffman, *The Regulars*, 204.

beneficial to employ a larger formation with the depth of forces to prevent culmination during an attack. Also, some commanders viewed the relief-in-place of divisions as one of the most difficult missions, so with larger divisions this relief potentially occurred less often. Lastly, General Pershing expected the American divisions to conduct a different form of warfare than what the other allied countries, a form he called, "open warfare," which may have required a greater amount of mass than the European partners' method of trench fighting.¹⁰

After General Pershing arrived in France on June 13, 1917, he conducted a number of meetings with French and British generals, especially General Philippe Petain of the French Army and Field Marshal Douglas Haig, the British Expeditionary Force (BEF) Commander, to develop an understanding of conditions in France. Following these meetings, General Pershing further developed his concept of open warfare, which he articulated as,

It was my opinion that the victory could not be won by the costly process of attrition, but it must be won by driving the enemy out into the open and engaging him in a war of movement. Instruction in this kind of warfare was based upon individual and group initiative, resourcefulness and tactical judgment, which were also so great advantage in trench warfare. Therefore, we took decided issue with the Allies and, without neglecting thorough preparation for trench fighting, undertook to train mainly for open combat, with the object from the start of vigorously forcing the offensive. ¹¹

In order to conduct this type of warfare, General Pershing needed staff officers at the divisions capable of translating his orders and intent into actions for the subordinate units. Prior to the Great War, the Army produced capable staff officers through the Staff College at Fort

¹⁰ James G. Harbord, *The American Army in France, 1917-1919* (Boston, MA: Little, Brown, and Company, 1936), 102-104. Major General Harbord served as General Pershing's Chief of Staff and provided insights into some of the decisions made by the AEF Commander. John J. Pershing, *My Experiences in the World War* (New York: Frederick A. Stokes Company, 1931), I:112-114 & 152. General Pershing never links directly this large formation to his concept of open warfare, but does mention in his conversations with the British how a lack of troops in the formations led to a loss of momentum during offensive operations. Mark Ethan Grotelueschen, *The AEF War of War: The American Army and Combat in World War I* (New York: Cambridge University Press, 2007), 27-29. Culmination is when a force is no longer able to continue its desired operation (whether offensive or defensive) due to casualties, the effect of enemy actions, or a change in momentum. Headquarters, Department of the Army, Field Manual 1-02, *Operational Terms and Graphics* (Washington, DC: Government Printing Office, 2010), 1-51

¹¹ Pershing, My Experiences in the World War, I:152.

Leavenworth, Kansas or the Army War College in Carlisle, Pennsylvania, but the number of graduates was too low to support this rapid expansion of the U.S. Army. In addition, the two years of instruction at the Staff College, with one year at the School of the Line and another year at the Staff College, did not support the class volume required for qualified staff officers to support the needs of the planned U.S. Army size for the war in Europe. ¹²

In order to solve this shortfall, General Pershing developed a common table of organizations for the division staff across all of the AEF divisions, and established the Army General Staff College (AGSC) in Langres, France. In addition, division commanders witnessed their staffs improve during the course of the war through the conduct of complex, synchronized operations. Through these efforts, the American Expeditionary Force hoped to build the capabilities to break through the stalemate of trench warfare and allow American forces to fight a war of movement against the Imperial German Army.

The Division Staff Organization

The duties and authorities of the various staff elements across the AEF were in a state of flux at the start of U.S. involvement in the Great War. The officers staffing these duties witnessed a change from the constabulary-focused duties on the American frontier to a fast-paced, technically complex shift in duties. During this conflict, division staffs had to coordinate train, truck, and ground movements of large numbers of soldiers across the Western Front to meet set objectives. It was during this period that the size of staffs, especially at the division-level, began

¹² Peter J. Schifferle, America's School for War: Fort Leavenworth, Officer Education, and Victory in World War II (Lawrence: University Press of Kansas, 2010), 10-11; Pershing, My Experiences in the World War I:103; Jonathan M. House, "The Fort and the New School, 1881-1916," in A Brief History of Fort Leavenworth, 1827-1983, ed. John W. Partin (Fort Leavenworth, KS: Combat Studies Institute, 1983). The number of graduates of the School of Infantry and Cavalry, School of the Line, and Army Staff College was 661 from 1905 through 1916. Author's research based on graduate names listed in the Commandant of the Army Service School Commandant's Annual Reports from 1905 through 1916.

to grow to accommodate the complexity found with greater mechanization and sustainment requirements, as well as the larger scale of operations on the French battlefields. ¹³

In May 1917, the U.S. Army sent a small contingent of officers to Europe to study the British and French Armies and provide recommendations for the structure of the American Expeditionary Force and changes to equipment within the U.S. Army. The report this contingent produced, referred to by the U.S. Army General Staff as the *Baker Report*, consisted of recommendations from fifteen officers with experience from the General Staff, Field Artillery, Infantry, Cavalry, Engineers, and Quartermasters. The recommendations provided by this panel to General Pershing became the backbone of how the AEF organized and dictated the size of the division-level staffs. ¹⁴ Using the *Baker Report's* recommendations, General Pershing issued General Order Number Eight on July 5, 1917, which provided the organization of the AEF headquarters and how subordinate headquarters were to function. ¹⁵

The U.S. Army acknowledged that a capable staff was a major requirement for the battlefields of the early-twentieth century. In a Provisional Staff Manual drafted in November 1918, the texts stated, "A military unit must be controlled by a single mind capable of coordinating all the different forces at the unit and of employing the unit at its maximum efficiency. In a large command it is impossible for a single mind to study, understand and execute all the

¹³ The complexity included the introduction of military timetables to movement along railroads, the increased requirements for logistical sustainment, especially small arms and artillery ammunition, and, the increased size of formations. Martin van Creveld, *Command in War* (Cambridge, MA: Harvard University Press, 1985), 186-188.

¹⁴ Headquarters, Department of the Army, "Baker Board Report," *Organization of the American Expeditionary Forces*. Vol. 1 of *The United States Army in the World War, 1917-1919* (1948; repr., Washington, DC: Center for Military History, 1988), 55-117.

¹⁵ Headquarters, American Expeditionary Force, "General Order Number Eight," In *General Orders, General Headquarters, American Expeditionary Forces*, vol. 16 of *The United States Army in the World War, 1917-1919* (1948, repr., Washington, DC: Center for Military History, 1988), 13-24.

details that enter into the exercise of command and leadership."¹⁶ The staff provided the details a commander needed to make informed, technical decisions and served to ensure subordinate organizations executed the tasks directed by the commander.¹⁷

The division staff consisted of three major groupings during this period. The first was the general staff, the second was the technical staff, and the third was the administrative staff. The General Staff consisted of four sections: the Chief of Staff; the administrative section, called the G-1; the intelligence section, called the G-2; and the combat section, called the G-3. Within a division staff during this period, the administrative section handled both personnel administration and logistical requirements. It was only in corps and above organizations that the administrative and logistical functions split into a separate sections, with the logistics section referred to as the G-4. ¹⁸

The Chief of Staff had the difficult task of organizing the division staff and ensuring the staff met the division commander's guidance. The commander expected the Chief of Staff to handle the routine matters of the division and manage the elements composing the technical and administrative staff. The 1914 *Field Service Regulations* states, "He [the Chief of Staff] controls and coordinates the operations of the troops and all administrative and technical services under

¹⁶ "Provisional Staff Manual #4," Army General Staff College, Fourth Course, dated November 1918 (Combined Arms Research Library Archives, Call Number: Section 11, Shelf 5).

¹⁷ Thomas, *The History of the AEF*, 30-31; Martin van Creveld, *Command in War*, 148-188.

¹⁸ Headquarters, Department of War, *The Staff Manual* (Washington, DC: Government Printing Office, 1917), 6-7; "Lecture (4), December 4, 1917, Division and Corps Staff Work," Army General Staff College Lectures, First Course (Combined Arms Research Library Archives, Call Number: Section 11, Shelf 5). The 1914 *Field Service Regulations* lays out the three sections of the General Staff in a different manner, with the first section being combat, the second administration, and the third was intelligence. *Field Service Regulation with changes 5 February 1916*, 118. The AEF staff also included a training section, called the G-5 which oversaw the subordinate unit's preparations for combat and the establishment of the AEF schools in France; Pershing, *My Experiences in the World War*, I:150-151. For echelons below division, the battalion, regiment, and brigade-sized units had small administrative staffs. The battalion commander had an adjutant; a regimental commander had an adjutant, surgeon, and personnel officer; and a brigade commander, who was a one-star general, had an aide, adjutant, and liaison officer; "Table of Organization #2," Army General Staff College, Fourth Course (Combined Arms Research Library Archives, Call Number: Section 11, Shelf 5).

the orders of his commanders." The Chief of Staff also had the responsibility of signing the field orders issued to the subordinate organizations. 19

The G-1 Section, or the Administrative Section, was the largest on the division staff and had a number of wide-ranging functions. The division G-1 had responsibility for tracking unit strengths, unit replacements for men and horses, disbursement of pay to the soldiers, claims, burials, discipline, troop comfort, billets and billeting, supplies, transportation, construction, medical evacuation, postal services, and requisitions of supply. Many officers considered the G-1 the closest staff officer to the soldiers, as he had to monitor the condition of billeting and the status of pay. He also produced the administrative orders detailing the troop movement timetables and location of resupply depots for the division. Lastly, the G-1 had the monumental task of developing the train car requirements for the movement of the division in France.²⁰

The G-2, or intelligence section, had the responsibility of providing the division commander the estimates of enemy intentions, strengths, and terrain considerations. The section had three major areas of responsibility: information, topography, and censorship. Within the information arena, the G-2 tracked the enemy order of battle, enemy's distribution along the front, estimated number of effective enemy soldiers, enemy's organization and morale, and estimated time for enemy reserves to reinforce a portion of the trench. This information assisted the division commander in developing a plan of attack that potentially achieved General Pershing's desire for open warfare. The topography sub-section oversaw the estimates of the terrain over which the division expected to maneuver and provided maps needed for operations. The censorship tasks reviewed all correspondence, whether private communications or press

¹⁹ Headquarters, Department of War, *Staff Manual* (Washington, DC: Government Printing Office, 1917), 9-10.

²⁰ The list of duties for the G-1 was derived from lectures presented during the Army General Staff College, Fourth Course, which occurred from October through December, 1918. "Administrative Duties #1, 11 October 1918," Army General Staff College, Fourth Course (Combined Arms Research Library Archives, Section 11, Shelve 5).

publications, to ensure someone did not release information that might be of value to the enemy, or as stated in the 1914 *Field Service Regulations*, "prejudicial to the welfare of the forces in the field."²¹

One major difference between the G-2 section and the other two division staff sections was the lack of order writing authority for the G-2. The G-1 had authority to produce the administration order, and the G-3 produced the field orders, which the Chief of Staff approved. The G-2 was also very reliant on information produced by the subordinate units' patrols and reconnaissance conducted by the Allied airplanes to develop his intelligence estimate for the division commander. Additionally, the G-2 section oversaw the AEF censorship policies for official communications, press releases, and private letters back to the United States. ²²

The G-3 Section had the responsibility of producing the field orders that drove military operations. This section at the division level also developed the training plans for the subordinate brigades ensuring subordinate unit preparation for combat operations. The G-3 developed the friendly forces staff estimate, which when combined with the G-2's enemy estimate, produced an overall estimate of the situation for the division commander. This section also produced the war diary for the division headquarters and operated the message center with subordinate and higher echelons. To assist with the messaging requirements, the division Chief Signal Officer worked in the G-3 section.²³

Besides, for the General Staff, a division commander also had technical and administrative advisors assigned to his headquarters. The technical advisors for a division

²¹ Duties for the G-2 were laid out in the "Provisional Staff Manual" provided to the Fourth Course of the Army General Staff College, "Provisional Staff Manual," Army General Staff College, Fourth Course (Combined Arms Research Library Archives, Section 11, Shelf 5); *Field Service Regulation with Changes through 5 February 1916*, 165.

²² "Provisional Staff Manual," Army General Staff College, Fourth Course (Combined Arms Research Library Archives, Section 11, Shelf 5).

²³ Staff Manual, 10-11.

consisted of an artillery officer, an engineer officer, a gas officer, a machine gun officer, and a surgeon. These advisors provided the division commander advice on the specific employment of the new systems found on the World War I battlefield, as well as recommendations for how to mitigate the enemy's employment of these systems. All the technical staff, except the surgeon, worked in the G-3 Section, while the division surgeon worked with the G-1.²⁴

The administrative sections focused much of its efforts on the paperwork necessary to manage a large number of soldiers and provided commanders recommendations on soldier-related concerns. The administrative section consisted of subsections such as: the records section, which managed the daily reports of personal and routine matters; the inspection section that condemned unserviceable property in the division, verified money accounts, and monitored conduct and discipline of the division; and, the law section served to provide the commander legal advice, specifically in regards to court-martials. Additionally there were supply and sanitary sections that advised the commander on supplies for the division headquarters, not on division-level logistics, and concerns to mitigate disease and contagions within the formation. ²⁵

The Table of Organization for a division headquarters listed the strength as twenty-nine officers and 135 enlisted soldiers. The accommodations for the staff varied based on where a division located once it arrived to France. During a lecture presented during the first Army General Staff College Course on December 4, 1917, the lecturer stated, "Headquarters must be established in a central place, with good communication in every direction. The rooms (if you are lucky enough to have rooms) or the dug-outs must be as comfortable as possible. I will not

²⁴ "Organization of a Division Headquarters," Army General Staff College, Second Course (Combined Arms Research Library Archives, Section 11, Shelf 5).

²⁵ Staff Manual, 14-15.

venture to say that no work can be done without comfortable accommodations, but one thinks and writes better in a heated room than under a damaged, leaky roof."²⁶

A future Chief of Staff of the Army, George C. Marshall, served as the G-3 for the First Division in 1917. In an autobiography published after his death, entitled *Memoirs of My Services* in the World War, 1917-1918, Marshall went into some detail describing his living conditions during his time in France. From this work, one develops a sense that the division staff attempted to occupy buildings as near the front as often as possible to ensure the staff could establish stable telephone and telegraph lines back to their higher headquarters, while having ensured they had the right conditions to facilitate staff work, not possible in a open trench.²⁷

The conditions in which a staff lived may have produced resentment from the officers and soldiers in the brigades and battalions. One unit history, which may sum up the feelings of many divisions, stated in regards to its line and staff relations, "Indeed, it functioned (to use a word dear to the heart of the army) more efficiently and with less friction than most divisions of comparable experience." This statement stemmed from both a view of the different conditions the division staff lived, compared to frontline soldiers, but also from the tensions that appeared to exist between subordinate commanders and their high commander's staff.²⁸

The Army General Staff College, Langres France

After developing the structure of the division staff, General Pershing knew he had to create a system to produce rapidly educated staff officers. The British and French armies initially opened their staff schools for American officers to attend, but General Pershing believed the AEF

²⁶ "Lecture (4), December 4, 1917. Division and Corps Staff Work," Army General Staff College, First Course (Combined Arms Research Library Archive, Section 11, Shelf 5).

²⁷ George C. Marshall, *Memoirs of My Services in the World War, 1917-1918* (Boston, MA: Houghton Mifflin Company, 1976), 25-27 and 102.

²⁸ George H. English, Jr., *History of the Eighty-Ninth Division, U.S.A.* (Denver, CO: Smith-Brooks Printing Company, 1920), 298.

had to establish a U.S. Army general staff training school in France to meet the demand for staff officers and ensure the officers received training consistent with how he believed the U.S. would fight.²⁹

On October 10, 1917, the AEF Headquarters published General Orders Number 46, which established the U.S. Army Staff School, including the Army General Staff College (AGSC). The AEF G-5 Section, responsible for training, led by Brigadier General Paul B. Malone oversaw the creation of these schools. General Pershing envisioned the AGSC conducting a three to four-month period of instruction to provide mid-grade officers the skills necessary to serve successfully as part of a division, corps, or army group general staff.³⁰

With the publishing of General Order 46, the AEF designated the first class consisting of 100 officers due to arrive in France, or officers within the AEF headquarters. The Staff College Commandant, Brigadier General James W. McAndrew, established AGSC in Langres, France and the first class commenced on November 28, 1917 with only seventy-five students.³¹

The first course at AGSC in Langres consisted of a class schedule that a prior graduate of Fort Leavenworth's General Staff School recognized. The instruction involved lectures, conferences, and map problems that worked through problems a commander expected a general

²⁹ Pershing, My Experiences in the World War, I:104 and 154.

³⁰ Pershing, *My Experiences in the World War*, I:155; Harbord, *The American Army in France*, 97-98; "Report of G-5, Appendix No. 3, History of Army General Staff College" (AEF Records. National Archive, Call Number: RG 120, Box 22, Folder 218).

³¹ Headquarters, American Expeditionary Forces, "General Orders Number 46," *General Orders, GHQ, AEF*. Vol. 16 of *United States Army in the World War, 1917-1919* (Washington, DC: Center of Military History, 1992) 93-95; Headquarters, American Expeditionary Forces, "Army General Staff School," *Reports of the Commander-in-Chief, AEF, Staff Sections and Services*. Vol. 14 of *United States Army in the World War, 1917-1919* (Washington, DC: Center for Military History, 1991), 333-335.

staff officer to solve or on which understanding was required. The instruction dedicated Wednesdays and Saturday to solving the map problems presented during the course.³²

The expectations for the students were to complete twenty map problems during the thirteen-week course, which required the students to demonstrate knowledge of the presented courses and communicate the solution through mission orders. The topics of those map problems included quartering a division, moving a division by rail and truck, and a complete division offensive operations order. Due to a lack of American instructors, the students conducted critiques of each other's work in addition to receiving a faculty-created solution to the problem. The instructors then conducted a conference to work through the answers and to provide their critiques of the students' work. The final map problem required the students to write a division order based on receipt of a corps-level order. The instructors considered this final map problem a cumulative review of all the previous material, and the students had a week to complete it. 33

The final map problem also represented the type of concurrent planning commanders expected of their division and corps staff planners. General Marshall best related the complexity of these operations when he detailed the difficulties associated with moving U.S. soldiers from St. Mihiel to the Meuse-Argonne front. He reflected, "...I could not recall an incident in history where the fighting of one battle had been preceded by the plans for a later battle to be fought by the same army on a different front, and involving the issuing of orders for the movement of troops already destined to participate in the first battle, directing their transfer to the new field of

³² "Army General Staff College – AEF – France, Course of Instruction, Nov 28, 1917, to March 10, 1918." Army General Staff College, First Course (Combined Arms Research Library Archive, Section 11, Shelf 5).

³³ "Report of G-5, Appendix No. 3, History of Army General Staff College." AEF Records (National Archive, Call Number: RG 120, Box 22, Folders 218).

action."³⁴ At Langres, the students were exposed to this type of difficult planning to better prepare them for operations on the Western Front.

The first course had instructors detailed by the French and British armies to assist with teaching subjects specifically related to trench warfare in Europe. Students received instruction on the organization of the British and French armies as well as detailed lectures on artillery planning, logistics, intelligence, and the organization of the German Army to assist with the map problem solutions. During this course, the facility at Langres improved as well when electricity and better furniture became available for the school. With the lowest pass rate of the four courses held in Langres, the first course had only forty-two of the seventy-five students meeting all the requirements by the February 15, 1918 graduation.³⁵

The AEF conducted three additional AGSC courses at Langres through the armistice on November 11, 1918. These other courses followed a similar curriculum, though the faculty included General Pershing's concepts of open warfare starting in the second course. The second course started on March 4, 1918 with 166 students, and 144 graduated on May 30, 1918. During this course, the German Spring Offensive began, which resulted in the British Army recalling their instructors to their units. The facility also continued to expand and incorporated the use of newer technologies, such as headquarter telephones, to provide realism to the classroom instruction on headquarter activities.³⁶

³⁴ Marshall, Memoirs of My Services in the World War, 1917-1918, 137-138.

³⁵ "Report of G-5, Appendix No. 3, History of Army General Staff College." The first course only had a fifty-six percent graduation rate.

³⁶ Ibid,. The second course had the highest graduation rate at eighty-seven percent. Marshall, *Memoirs of My Services in the World Wars, 1917-1918*, 75-76. Future Chief of Staff of the Army, General of the Armies George Marshall, was the Division G-3 for 1st Infantry Division and taught briefly at AGSC during this period. The division commander recalled him back to the division just as Marshall was to assume teaching many of the classes from the departed British officers. Schifferle, *American's School for War*, 12-13.

The third course ran from June 17, 1918 through September 15, 1918. The course began with 250 students and graduated 153 officers. During this course, approximately one-third of the class received temporary orders to the front to assist units preparing for the first American offensive at St. Mihiel. As the American build-up of divisions into France continued, AGSC tapped into a greater pool of experts to present recent lessons to the students on lessons learned during operations on the Western Front.³⁷

The fourth and final course at AGSC began on October 7, 1918 and ran through the armistice with the class graduating on December 31, 1918. This course had a class size of 316 students with 195 officers graduating. The fourth course included an addition of a staff ride to the Meuse-Argonne battlefield and a changeover to primarily American instructors with only one British and French officer on the faculty. This increase in American instructors demonstrated the growing capabilities within the AEF as the number of qualified officers increased to allow for more American instructors. The fourth course also continued the tradition of employing visiting staff officers to provide lessons to the students, including the G-3 of Second Army, the G-3 of Thirty-Second Division, and the III Corps' Chief of Staff and G-1.³⁸

Following the graduation of the fourth course, the AEF closed the AGSC at Langres on January 1, 1919. Through the four courses, the AEF sent 770 officers for training and 537 completed the course, who returned to their units as trained general staff officers. With a seventy percent graduation rate for all four courses, the AGSC in Langres maintained difficult standards, even during the darkest periods of the AEF involvement in the Great War.³⁹

³⁷ "Report of G-5, Appendix No. 3, History of Army General Staff College." The third course had a seventy graduation rate.

³⁸ Ibid., The fourth course had a sixty-one percent graduation rate.

³⁹ "Army General Staff College." In *Reports of the Commander-in-Chief, Staff Sections and Services*, vol. 13 of *The United States Army in the World War, 1917-1919* (Washington, DC: Center for Military History, 1989), 333-335. The seventy percent graduation rate was very low compared to the rates of graduation both before and after World War I at the Army Service Schools in Fort Leavenworth, Kansas. The record does not support whether instructors maintained higher standards at Langres, or if the rapid

Division Staff Training

After developing the structure for the division staff and instituting a formalized education system, the third step in the AEF's efforts to create capable division staff officers was continued development of the staff functions through operations in France. General Pershing realized that he had limited time to produce skilled staff officers through a formalized school system. He believed the formal education, through either the General Staff College in Leavenworth before the war or attendance at AGSC in Langres, produced a common language among staff officers through the established doctrine and grounding in theory, but it was only through "the costly school of experience" that an officer developed all the skills necessary for success.⁴⁰

The AEF Chief of Staff, Major General James McAndrew, further articulated the vision of General Pershing by publishing a directive to the II Army Corps Commander on June 13, 1918:

The urgent need for General Staff officers for all units of the AEF makes it imperative that suitable General Staff material, found among the younger officers of the regular service and especially among the National Guard and reserve officers, be developed as soon as possible. To that end the work of the General Staff College at Langres must be supplemented by training in General Staff duties of suitable material by General Staffs of such corps and divisions as now have efficient working staffs. Each such staff must consider itself a school for this training.⁴¹

expansion of officers led to more attending who did not possess the capabilities to graduate the rigorous course. Graduation rates before and after World War I the author derived from examining the *Annual Reports from the Commandant: Army Staff Schools* from 1905-1916 and 1920-1925 maintained by the Combined Arms Research Library. Headquarters of the Commandant, *Annual Reports from the Commandant: Army Staff Schools* (Fort Leavenworth, KS: CGSS Press, 1916). Timothy K. Nenninger, "Creating Officers: The Leavenworth Experience, 1920-1940," *Military Review LXIX:11* (November 1989): 58-68. See also Appendix A.

⁴⁰ Pershing, *My Experiences in the World War*, I:155-156. Fort Leavenworth's Staff School closed during the American involvement in World War I, but reopened in January 1919. Commandant, Army General Staff School, *Annual Report of the Commandant of the General Staff School* (Fort Leavenworth, KS: The Press of the General Staff School, 1920), 3.

⁴¹ J.W. McAndrew, "Letter to Commanding General, II Army Corps, AEF" In *Training and Use of American Units with the British and French*, vol. 3 of *The United States Army in the World War, 1917-1919* (Washington, DC: Center for Military History, 1989), 153.

Through a hybrid system of formally-directed mentorship, as well as informal training by General Staff trained officers, the AEF worked to develop the staff capability to maneuver the increasing number of American divisions arriving into France. Of the thirty divisions that arrived in France before the Armistice on November 11, 1918, only eight of the division Chiefs of Staff had not attended the Fort Leavenworth School of the Line, General Staff College, or the Carlisle Barrack's Army War College before the Great War.⁴²

The informal mentorship of junior staff officers by then-Colonel George Marshall demonstrated the intent of General Pershing:

I had three young assistants, without military experience prior to the war, and these were temporarily assigned to regiments to get in more intimate touch with the actual conditions of the troops. The careers of these young men were very interesting and worth recounting. All of them under twenty-four and new to the Army, they had been assigned to me the previous January. With no training whatsoever as to staff duties, they had everything to learn, while I had little or no time in which to teach them. But under 'Monsieur Stern Necessity' they developed into amazingly capable staff officers, and were an interesting example of the rapidity with which an American can adapt himself to the performance of an intricate and difficult task.⁴³

Through these efforts training and mentoring staff officers, the AEF underwent profound transformation into a capable force in a short period. In the fall of 1918, the AEF entered into sustained, offensive operations against the Imperial German Army at St. Mihiel and then in the Meuse-Argonne Forest. Through the examination of two divisions in the subsequent chapters, one will gain an appreciation for the extent of the division staff development during combat along the Western Front.

⁴² Edward M. Coffman, "The AEF Leader's Education for War," in *The Great War, 1914-1918: Essays on the Military, Political and Social History of the First World War*, ed. R.J.Q. Adams (College Station: Texas A&M University Press, 1990), 154-155.

⁴³ Marshall. *Memoirs of My Services in the World War*. 114-115.

Chapter 3

Second Division

The first case study will examine the Second Division, which was a Regular Army

Division that arrived early in the American deployment to France. The Second Division arrived
and trained in time to take part in the stopping the German Spring Offensives in early 1918, and
then conducted offensive operations as part of the Battles of St. Mihiel and the Meuse-Argonne.

This case study will provide a detailed overview of Second Division's operations, and then
evaluate the division staff's performance during these complex operations to demonstrate what
improvement, if any, the division staff underwent during its time in combat.

Overview of Second Division's Operations

The Second Division constituted in Bourmont, France from a Regular Army Brigade and United States Marine Corps Brigade on October 26, 1917. This division was unique in both its organization with a Marine Brigade, and by organizing in France as compared to the other Regular Army divisions, which organized in the United States before sailing for the Western Front. Second Division conducted training focused on trench warfare, as well as General Pershing's open maneuver concepts, before entering into the trenches on March 13, 1918.⁴⁴

The subordinate units of Second Division consisted of Third Brigade, composed of the Ninth and Twenty-Third Infantry Regiments and the Fifth Machine Gun Battalion; and, Fourth Brigade (Marine), consisting of the Fifth and Sixth Marine Regiments and the Sixth Machine Gun

⁴⁴ Historical Section, U.S. Army War College, *Order of Battle of the United States Land Forces in the World War: American Expeditionary Forces, Divisions* (Washington, DC: Government Printing Office, 1931), 25-27. In parts of the historic record, specifically Leonard Avery's *The War with Germany*, First Division is also listed as forming in France, but its elements formed in New York before sailing for St. Nazaire, France under the designation the First Expeditionary Division. Once in France, the War Department renamed the organization to First Division. *Order of Battle of the United States Land Forces in the World War*, 5-6.

Battalion (Marine), which all served as the primary maneuver elements. The Division also had the Second Field Artillery Brigade, with the Twelfth and Fifteenth Field Artillery (75-mm Guns), the Seventeenth Field Artillery (155-mm Howitzers), and the Second Trench Mortar Battery, which provided indirect fire support to the Division. Additionally, the Divisional Troops section provided support for the Division Headquarters, and consisted of the Fourth Machine Gun Battalion, Second Engineer Battalion, First Field Survey Battalion, and a Headquarters Troop. Lastly, the Division Trains provided the supply and rear-area support to the organization, and included the Second Train Headquarters and Military Police Company, the Second Ammunition Train, the Second Supply Train, the Second Engineer Train, and the Second Sanitary Train. All told, the Second Division had an authorized strength over 28,000 officers and soldiers to conduct combat operations. 45

When the Second Division entered into the trenches in March 1918, they were completing the training plan developed by General Pershing. The final phase of the American training process paired U.S. divisions with French or British units in a quieter sector of the Western Front to acclimate the soldiers to life in the trenches. Second Division fell under the French X Corps, which was part of the Second French Army, which operated near St. Mihiel and Verdun. During this period, the Second Division conducted patrols across "No Man's Land" to gather intelligence from the Germans and conduct raids. They also experienced the effects of artillery and suffered the division's first killed soldier, Private Stanley Dobiez, on March 19, 1918 during an artillery barrage that resulted from U.S. and German patrols encountering each other during a raid. 46

⁴⁵ Historical Committee, Second Division Association, *The Second Division American Expeditionary Force in France, 1917-1919* (New York: The Hillman Press, Inc., 1937), 1.

⁴⁶ Ibid., 17-20; Order of Battle of the United States Land Forces in the World War, 29.

This training period allowed the division to learn the skills necessary to survive in the type of warfare experienced in the trenches, including exposure to poison gas attacks, artillery barrages, and conducting trench raids. Second Division stayed in the Toulon and Troyon Sectors until May 1918, when the division received orders to serve as the reserve for the French Group of Armies, in a sector northwest of Paris.⁴⁷

While the Second Division finished its training in the quieter Toulon Sector, the German Imperial Army, under the direction of First Quartermaster General Erich Ludendorff, began a series of offensives. General Ludendorff designed these attacks to take advantage of the recent Russian capitulation on the Eastern Front and defeat the Allied Powers before the United States could bring all of its troops across the ocean. General Ludendorff aimed to divide the French and British forces by penetrating the Allied lines between Arras and St. Quentin, north of the Somme River. He followed this offensive up with a second that attacked the British Army in Flanders, and then a third against the French at Chemin des Dames, which launched on May 27, 1918. These German offensive had success breaching parts of the Allied trenches and pushed the German positions within fifty miles of Paris. This led the French Army Group to commit the Second Division near Chateau-Theirry and Belleau Wood to assist in halting the German advances and ensure the Germans did not overrun Paris. 48

Second Division conducted defensive operations against the German attack from May 31 through July 16, before transitioning to the offense as part of the Aisne-Marne Operations. During these operations, Second Division served under French Command through an agreement between General Pershing and the French General Henri Petain to provide emergency U.S. reinforcements to the overwhelmed French forces. These operations by Second Division, in conjunction with

⁴⁷ Second Division Summary of Operations in the World War, 4.

⁴⁸ John S.D. Eisenhower, *Yanks: The Epic Story of the American Army in World War I* (New York: Simon and Schuster, 2001), 100-109, 117-120, 135.

actions by First Division and Third Division on other parts of the Western Front, provided the Allied forces the capability to both halt the German Spring Offensive, and then allow for a transition to limited offensive operations.⁴⁹

These operations were not without cost. During the six weeks the Second Division defended against this German offensive, the division lost 1,349 men killed in action with an additional 6,527 wounded. These heavy losses required the division's staff to not only conduct operational planning against the German attacks, but also conduct significant resupply and reinforcement operations to maintain the fighting capability of the two infantry brigades. Second Division served under French command until August 1918, when it left the line and moved under the command of the American I Corps back in the St. Mihiel region. ⁵⁰

Once the Allied Forces were able to defeat the German Spring Offensive, General Pershing worked to consolidate the American forces into the First American Army, which constituted on August 1, 1918. With an American Army, General Pershing now had the headquarters to control his forces and prevent additional amalgamation of U.S. forces under French or British commands. This also provided him the opportunity to plan the first American offensive at St. Mihiel, which General Pershing planned to launch in mid-September 1918.⁵¹

General Pershing envisioned the attack at St. Mihiel as a major offensive operation, but the Allied Commander, Marshal Ferdinand Foch, needed the American forces for another offensive operations launching from the Meuse-Argonne region by the end of September 1918.

⁴⁹ Order of Battle of the United States Land Forces in the World War, 31-33; Pershing, My Experiences in the World War, II: 62-65.

⁵⁰ Second Division Summary of Operations in the World War, 23. The two Infantry Brigades suffered eighty-six percent of the total killed during these operations, and the division suffered over twenty-eight percent of the division's strength; analysis by the author. Order of Battle of American Land Forces in the World War, 35; Headquarters, Second Division, "Confidential Memorandum, Dated August 11, 1918," Regular Field Orders, 1918-1919, vol. 1 of Records of the Second Division (Fort Leavenworth, CGSS Press).

⁵¹ Pershing, My Experiences in the World War, II: 225-227.

This required General Pershing to shift the objectives of the St. Mihiel attack, from continuing the offensive to the German Hindenburg Line to a limited offensive focused on reducing the German salient. General Pershing then had to move forces immediately over three-hundred miles and launch another attack in a new direction at the Meuse-Argonne. These operations required enormous planning by the American staffs to ensure forces met very stringent movement and attack timelines.⁵²

As one of the more experienced divisions in the AEF, the Second Division received orders to seize the critical crossroads of Thiaucourt, which included both a rail-line and major road network within the German salient. Due to secrecy concerns, Second Division received its orders on September 7, 1918 from I Corps to conduct operations on September 12. This required the division to analyze rapidly the Corps mission and prepare the division order for its subordinate units. The Second Division Commander, Marine Major General John A. Lejeune, highlighted the work undertaken by the division staff in preparation for the attack:

The Second Division tentative plan and its order for the St. Mihiel attack consisted of thirty-three mimeographed foolscap pages, and included not only the plan of attack, both general and detailed, with reference to each unit, arm and branch, but also full administrative details and ten chapters containing instructions concerning such subjects as the plan of liaison; communication by telephone, radio, telegraph, postal service, balloons, airplanes, panel signals, visual signals, rocket signals, carrier pigeons, couriers and runners; cipher codes and code names; and instructions in regard to the organization of the conquered ground and the distribution of the troops thereon. In other words, the plan of attack and the order were compendiums of information and instruction.⁵³

As a part of I Corps, the Second Division launched its operation in the early morning on September 12, 1918. The attack at St. Mihiel occurred simultaneously with a German decision to withdrawal from the salient, which allowed for a rapid advance by the American forces. This

⁵² Pershing, *My Experiences in the World War*, II: 262-264; Marshall, *Memoirs of My Service in the World War*, 137-139; Hunter Liggett, *AEF: Ten Years Ago in France* (New York: Dodd, Mead and Company, 1928), 143-146.

⁵³ John A. Lejeune, *The Reminiscences of a Marine* (Philadelphia, PA: Dorrance and Company, 1930), 322.

resulted in Second Division capturing over 3,300 prisoners and a large amount of German equipment with comparatively few American casualties for a World War I operation. On September 16, 1918, the Seventy-Eighth Division relieved the Second Division, who then conducted a rail movement to Toul, France, located to the north-west of Paris. Once the division movement to Toul was complete, Second Division received orders to serve as the reserve for the French Group of Armies in the Center. This allowed the division to refit its equipment and briefly integrate new replacements into the formation in preparation for upcoming offensive operations.⁵⁴

While the Second Division conducted refit, the majority of the AEF repositioned from St. Mihiel and launched the largest American offensive of the war between the Meuse River and Argonne Forest. The operation commenced on September 26, 1918 with a simultaneous three-corps attack by the AEF aimed at seizing the German railhead in Sedan, in order to cut the German's lines of supply along the Western Front. The French Fourth Army was on to the western flank of the American positions and launched an attack to support this offensive. During the French Fourth Army's assault, the attack stalled when attempting to seize the German held heights at Blanc Mont Ridge, a commanding piece of terrain that served as a major German artillery observation point in the area. This led to the French Fourth Army Commander, General Henri Gouraud, to commit the Second Division on September 30, 1918 to seize this critical terrain. ⁵⁵

⁵⁴ Lejeune, *The Reminiscences of a Marine*, 330-331; *Second Division Summary of Operations in the World War*, 46-48; Headquarters, Second Division, "Field Orders Number 30, 15 September, 1918: 18:00 hours," *Regular Field Orders, 1918*-1919, vol. 1 of *Records of the Second Division* (Fort Leavenworth, CGSS Press). During the St. Mihiel Offensive, Second Division suffered five-percent casualties (wounded and killed), which compares favorably to the earlier St. Thierry-Belleau Wood Campaign in which the division suffered over twenty-eight percent casualties. Appendix B lists the Second Division's casualties by campaign.

⁵⁵ Pershing, *My Experiences in the World War*, II: 290-292; Grotelueschen, *The AEF Way of War*, 252; Headquarters, Second Division, "Field Order 31, dated 20 September 1918: 15:00 hours," *Regular Field Orders, 1918*-1919, vol. 1 of *Records of the Second Division* (Fort Leavenworth, CGSS Press); Headquarters, Second Division, "Field Order 34, dated 1 October 1918: 17:00 hours," *Regular Field Orders, 1918*-1919, vol. 1 of *Records of the Second Division* (Fort Leavenworth, CGSS Press).

The French originally wished for the Second Division to launch its attack on October 2, 1918, but Major General Lejeune requested a twenty-four hour delay to ensure his field artillery brigade positioned its guns to cover the attack. This also provided the brigades adequate time to conduct reconnaissance and preparations for the attack. Major General Lejeune's decision had a positive effect; when the Second Division attacked on October 3, 1918, the unit rapidly secured a foothold on the critical terrain and captured over 3,000 German prisoners. By October 5, Second Division held the entirety of Blanc Mont Ridge and defeated numerous German counterattacks attempting to regain the ground. Second Division continued its attack and pushed the German defenders back past St. Etienne-á-Arnes by October 9, 1918. Due to the efforts of Second Division, the entire French Fourth Army advanced and drove the Imperial German Army across the Aisne River. ⁵⁶

Following the successful seizure of St. Etienne-á-Arnes, the Thirty-Sixth Division relieved the Second Division, which then reverted as a reserve for the French XXI Corps and the French Fourth Army. Second Division continued refit and reserve operations until October 24, 1918, when the division moved to the control of the U.S. First Army and participated in operations at the Meuse-Argonne. During this campaign, Second Division conducted a coordinated attack under the command of V Corps focused on driving the German Army across the Meuse River. Second Division, working with the Eighty-Ninth Division, captured the town of Tailly and seized the Barricourt Heights. This allowed the AEF to continue its drive to the Meuse, reaching the river by November 10, 1918. The division continued offensive operations as part of V Corps through the Armistice on November 11, 1918.⁵⁷

⁵⁶ Lejeune, *Reminiscences of a Marine*, 344-366; Pershing, *My Experiences in the World War*, II: 324-326; Grotelueschen, *The AEF Way of War*, 258-259.

⁵⁷ Second Division Summary of Operations in the World War, 69-97; Lejeune, Reminiscences of a Marine, 367-403; Pershing, My Experiences in the World War, II: 376.

An Evaluation of Second Division's Performance

During the time that Second Division conducted combat operations, the division staff improved in both how it issued orders to subordinate units and in what the orders contained to assist subordinate commanders. This improvement arose from the use of Army Staff College-trained staff officers in critical positions, as well as through the learning that comes from conducting complex, combat operations.

As a Regular Army division, Second Division's staff employed a number of Fort
Leavenworth's School of the Line and Army Staff College graduates throughout its time in
France. One of the division's first Chiefs of Staff in France, Colonel Harry H. Tebbetts, graduated
from the School of Infantry and Cavalry in 1905. Tebbetts' successor Brigadier General Preston
Brown graduated from both the School of the Line and Army Staff College before the war.
Brown's replacement, Colonel James C. Rhea, served as the Division G3 before his ascension to
Chief of Staff. Rhea also graduated from the School of the Line and Army Staff College at Fort
Leavenworth prior to the war. The Division G-2, Lieutenant Colonel George A. Herbst, was
likewise a graduate of the School of the Line and the Army Staff College. Later serving staff
officers, such as Colonel Hu Myers, who took over as the Division G3 for Colonel Rhea, attended
the Army General Staff Course at Langres, France in the Third Course, while Major LeRoy
Pearson, the Division G1 before the Battle of Meuse-Argonne, attended AGSC's Fourth Course.⁵⁸

The listing of officers demonstrated that Second Division had the concentration of general staff-trained personnel desired by General Pershing as he developed his overall AEF formation. During the course of combat operations, the quality of Second Division's orders

⁵⁸ Headquarters, Commandant Army Service Schools, *Annual Report of the Commandant of the Army Service Schools* (Fort Leavenworth, KS, Army Service School Press, 1909-1916); "Report of G-5, Appendix No. 3, History of Army General Staff College." AEF Records (National Archive, Call Number: RG 120, Box 22, Folders 218). Colonel Harry H. Tebbetts: School of Infantry and Cavalry 1905; Brigadier General Preston Brown: SOL 1913 (Honor Graduate) / ASC 1914; Colonel James C. Rhea: SOL 1908 / ASC 1909; Lieutenant Colonel George A. Herbst: SOL 1915 (Distinguished Graduate) / ASC 1916; Major C.H. Bridges: SOL 1908; Colonel Hu Myers: AGSC Third Class; Major LeRoy Pearson: AGSC Fourth Class.

dramatically increased. The Second Division's operations order for its defense at Chateau Thierry and Belleau Wood in June 1918, for example, was only a two-page order, which provided basic locations for their defensive line and expected times for division occupation of positions. There were few coordinating instructions, especially orders concerning the coordination of maneuver assets with fires, airplanes, or engineers. Subsequent orders for these operations included some additional assets, but provided few details to flesh out what the commander's intent or desired outcomes of the operations. ⁵⁹

The later orders Second Division produced for the Battles of St. Mihiel, Blanc Mont Ridge, and Meuse-Argonne, contained much greater detail, demonstrating a staff recognizing the amount of detail needed in orders to that ensure subordinate units had the information required for success on the battlefield. The order for St. Mihiel was over twenty-five pages, and included a detailed description of desired end states, coordination measures from a host of enablers to the maneuver units, and an in-depth liaison and signal plan. This order displayed a significant increase in quality, and the later orders continued to show a desire by the division staff to improve the support to their subordinate units.⁶⁰

One of the measurable statistics for Second Division's improvement include the reduction in the division's casualty rate during these major operations. During the German Spring Offensive, when Second Division, in hasty entrenchments, faced an attacking enemy force, the division suffered over twenty-eight percent casualties. When compared to the later operations as

⁵⁹ "Field Order Number 6: 1 June 1918: 6:00pm," *Regular Field Orders*, 1918-1919, vol. 1 of *Records of the Second Division* (Fort Leavenworth, CGSS Press). Commander's intent provides subordinate units a concise understanding of why they conduct an operation and provides a vision of the desired end states. This helps subordinate units achieve the commander's objectives and employ initiative to seize presented opportunities during operations. Department of the Army, Field Manual 1-02, *Operational Terms and Graphics* (Washington, DC: Government Printing Office, 2004), 1-39.

⁶⁰ "Memorandum from Commanding General Second Division, to Commander, First Army Group, Subject: Tentative Plan of Attack – Second U.S. Division (Regular), dated 8 September 1918," *Regular Field Orders, 1918-1919*, vol. 1 of *Records of the Second Division* (Fort Leavenworth, CGSS Press); Grotelueschen, *The AEF Way of War*, 250-252.

part of the Meuse-Argonne Campaign, specifically the major assault on Blanc Mont Ridge, in which Second Division attacked an entrenched enemy force, the division suffered between twelve to eighteen-percent casualties. While the Second Division endured the highest casualty rate of any U.S. division during World War I, however, the overall number does not capture the reduction in casualty percentages as operations progressed.⁶¹

The Second Division earned a stellar reputation during its time in the Great War. It underwent a number of setbacks early in its time fighting the Imperial German Army, but quickly developed a division staff capable of providing subordinate organizations the information necessary to execute complex operations. By the war's end, Second Division had captured over 12,000 German soldiers and had prepared to continue an offensive drive on the other side of the Meuse River when the guns fell silent on November 11, 1918.⁶²

⁶¹ Second Division Summary of Operations in the World War, 23, 33, 48, 67-68, 96-97; also see Appendix B for summary of Second Division's casualties by time period of the Great War. Ayers, *The War with Germany*, 117.

⁶² See Appendix D for a comparison of American Divisions statistics from World War I.

Chapter 4

Eighty-Ninth Division

The Eighty-Ninth Division, or "Woods' Own," was a National Army Division that arrived in France later in the war than the Second Division. As a National Army Division, the soldiers composing the Eighty-Ninth Division were primarily draftees drawn from the Midwest of the United States. This division arrived in France, and following initial training, participated in the Battles of St. Mihiel and Meuse-Argonne. The Eighty-Ninth served in close proximity to the Second Division during both operations. By examining the Eighty-Ninth's service during the war and conducting an evaluation of how the division operated, one can develop an understanding of how the division staff improved during the war.

Overview of Eighty-Ninth Division's Operations

Constituting at Camp Funston, Kansas in August 1917, the Eighty-Ninth Division contained soldiers drafted into the Army from Arizona, Colorado, Kansas, Missouri, Nebraska, New Mexico, and South Dakota. The original division commander was Major General Leonard Wood, who served previously as the Army Chief of Staff and many considered General Pershing's biggest rival for command of the AEF. The Eighty-Ninth formed around a nucleus of officers, who graduated from the first Officers' Training Camp at Fort Riley, and then in September through October, 1917 received its allocation of draftees to fill out the soldier billets. The Regular Army provided two Regular Army noncommissioned officers to each infantry company and field artillery battery to assist with training and to provide a small cadre of experience within this new division.⁶³

⁶³ The Eighty-Ninth Division Summary of Operations in the World War (Washington, DC: American Battle Monuments Commission, 1944), 1; William M. Wright, Meuse-Argonne Diary: A Division Commander in World War I, ed. William H. Ferrell (Columbia: University of Missouri Press,

During its time in Kansas, the Eighty-Ninth Division conducted trench warfare and open maneuver training to prepare the soldiers for conditions on the Western Front. Since the division consisted primarily of draftees, the division focused heavily on discipline and developing basic soldiering skills. Finally, in May 1918, the Eighty-Ninth Division received orders to proceed to France. Unfortunately for Major General Wood, General Pershing replaced him with Brigadier General Frank Winn, as Pershing sought to remove commanders he believed were over aged or unfit. ⁶⁴

As the Eighty-Ninth Division sailed for France, the division's structure mirrored the basic formation of the other American divisions. There were two infantry brigades. The 177th Infantry Brigade had two subordinate infantry regiments, the 353rd and the 354th, and the 341st Machine Gun Battalion. The second brigade, the 179th Infantry Brigade, had the 355th and 356th Infantry Regiments, and the 342nd Machine Gun Battalion. The 164th Field Artillery Brigade consisted of two seventy-five millimeter gun field artillery regiments, the 340th and 341st, a 155-mm gun field artillery regiment, the 342nd, and the 314th Trench Mortar Battery. This brigade provided the Eight-Ninth Division its needed indirect fire capability. Within the Divisional Troops, the Eighty-Ninth Division had the 340th Machine Gun Battalion, the 314th Engineer Regiment, the 314th Field Signal Battalion, and the Headquarter Troop Trains. The division had an authorized strength of 991 officers and 27,114 soldiers. 65

2004), 1-2; George H. English, Jr., *History of the Eighty-Ninth Division, U.S.A.* (Denver, CO: The War Society of the Eighty-Ninth Division, 1920), 18-21.

⁶⁴ Edward Coffman, *The Regulars* (Cambridge, MA: Harvard University Press, 2004), 208; English, *History of the Eighty-Ninth*, 39. Major General Leonard Wood originally commissioned as an Army surgeon, served with Theodore Roosevelt as a Rough Rider, and served as Army Chief of Staff from 1910 to 1914. Many considered Wood to be Pershing's greatest rival, which led to many conjectures for his removal by Pershing. Harbord, Pershing's Chief of Staff during the time of Wood's removal stated it was for medical reasons due to wounds received during the Philippines War, while the Eighty-Ninth Division History made specific mention that Wood passed his annual medical exam right before his removal. Pershing did not specifically mention why he removed Wood from command in his writings. Harbord, *The American Army in France*, 194-195; Coffman, *The Regulars*, 208; English, *History of the Eighty-Ninth*, 39.

⁶⁵ Eighty-Ninth Division Summary of Operations in the World War, 1-4.

In early July 1918, the Eighty-Ninth Division arrived in France and proceeded to complete its required training. Like Second Division, the Eighty-Ninth conducted trench training under the supervision of the French forces in a quiet sector. To complete this training, the Eighty-Ninth fell under the French Eighth Army. On August 3 and 4, 1918, the Eighty-Ninth moved to an area north of Toul, France. This movement was unique in that it was the first movement of American troops by bus conducted by an American transportation organization on American trucks. Before this movement, the AEF had relied on Allied trucks or transportation units. ⁶⁶

Once at the Western Front, the division began to replace elements of the Eighty-Second Division and on August 10, 1918, the Eighty-Ninth assumed command of its part of the trench line from Remenauville to Bouconville. This location served as the division's future launching point for the Battle of St. Mihiel in September. The Eighty-Ninth served under French command until August 20 and then fell under the command of the American IV Corps. The division focused on securing its part of the line and continued preparations for the future attack.⁶⁷

During the transfer of command with the Eighty-Second, the Eighty-Ninth received its first exposure to the horrors of chemical warfare. During the evening of August 7, 1918, the German Army launched three coordinated artillery strikes on the Eighty-Ninth's lines using mustard and phosgene gas, as well as a mix of high explosive rounds. This attack produced over 556 casualties and taught the division important lessons on establishing alternate positions in case of gas attack. ⁶⁸

As the training under the French finished, the Eighty-Ninth Division received a new division commander, Major General William M. Wright, who took command on September 6,

⁶⁶ Order of Battle of the United States Land Forces in the World War, 403-405; English, History of the Eighty-Ninth, 53.

⁶⁷ English, *History of the Eighty-Ninth*, 56-58; *Eighty-Ninth Division Summary of Operations in the World War*, 8-9.

⁶⁸ English, *History of the Eighty-Ninth*, 71.

1918, the day before IV Corps issued its operations order for the Battle of St. Mihiel. Major General Wright had little time to integrate with the division staff, and still had to develop a detailed order for the first all American offensive in the Great War. When the Battle of St. Mihiel launched on September 12, 1918, the Eighty-Ninth was the right-most division of the American IV Corps. To the Eighty-Ninth's right was the Second Division, who was the left-most division of I Corps. ⁶⁹

The Eighty-Ninth Division's attacks at St. Mihiel was very successful, as they maintained their position in regards to Second Division, seized their required objectives, and captured over 3,000 German prisoners during the first twenty-four hours of operations. There were some issues with congestion in the rear areas, especially affecting the positioning of the division's artillery, but overall the Eighty-Ninth Division had great success for its first major operation.⁷⁰

Once the offensive portion of the Battle of St. Mihiel finished, the Eighty-Ninth maintained a portion of St. Mihiel trench line, as the AEF withdrew other units in preparation for the Battle of Meuse-Argonne. During this period, the Eighty-Ninth Division conducted a series of coordinated raids and operations to support the AEF's deception plan to prevent German knowledge of the upcoming Meuse-Argonne campaign. Finally, on October 5, 1918 the Thirty-Seventh Division relieved the Eighty-Ninth to allow for refit and reconstitution before taking part in the latter stages of the Meuse-Argonne Campaign. ⁷¹

On November 1, 1918, the Eighty-Ninth Division, again beside the Second Division, conducted an attack as part of V Corps offensive operation to push the Imperial German Army across the Meuse River. The Eighty-Ninth had great success seizing its required objectives on the

⁶⁹ Wright, Meuse-Argonne Diary, 10-14; Order of Battle of United States Land Forces in the World War, 405.

⁷⁰ Wright, Meuse-Argonne Diary, 17-20; English, History of the Eighty-Ninth Division, 97-117.

⁷¹ Eighty-Ninth Division Summary of Operations in the World War, 16-19.

Barricourt Heights and then pushed towards the Meuse River. Finally on November 10, 1918, the division forced a crossing west of Pouilly and on November 11 occupied parts of Stenay when the AEF announced the armistice that took effect at 11:00am that day. There was some controversy with the Eighty-Ninth's actions in Stenay, as the Ninetieth Division believed it had captured the town ahead of the Armistice without any assistance from the Eighty-Ninth. However, with the impending Armistice and a desire by the American commander to liberate this town from German occupation, it appears as though the Eighty-Ninth reached the center of the town before combat operations ceased.⁷²

Evaluation of the Eighty-Ninth Division's Performance

The Eighty-Ninth Division performed remarkably well for a later arriving, National Army division. This division served for only twenty-eight days on an active front, but during that time advanced over forty-eight kilometers and captured over 5,000 German prisoners of war. No other National Army division had a record to match this accomplishment, and these actions compare closer to what Regular Army formations performed during the war. ⁷³

Upon arriving in France, the division's staff had to undertake difficult planning to prepare the division for operations in support of the St. Mihiel campaign. To accomplish this, the division sent the Chief of Staff, then-Major John Lee, and the G-2, then-Major Frank Smith, to France before the division to attend the Army General Staff College's Second Course at Langres. Once the division arrived in France, two additional staff officers, the G-3, then Major F.A. Doniat, attended the third course at Langres, while the G-1, then-Captain Clarence Boesch attended the fourth course. This provided the division a general staff trained cadre as the primary staff officers to train their subordinates. It does not appear as though any of the staff officers attended the Army

⁷² English, *History of the Eighty-Ninth Division, U.S.A.*, 226-241; Wright, *Meuse-Argonne Diary*, 159-166; *Order of Battle of the United States Land Forces in the World War*, 407 and 415.

⁷³ Avres, The War with Germany, 114-117.

Staff College at Fort Leavenworth before the war, though the division commander, Major General William Wright, attended the 1890 class of the School of Infantry and Cavalry.⁷⁴

The Eighty-Ninth Division spent a significant period of time training in Kansas from their initial formation in August 1917 until they departed for France in May 1918. Unfortunately, the division received and trained groups of draftees only to have these men reassigned to earlier departing divisions. It was only two weeks before sailing for France that the Eighty-Ninth received the men, which provided the bulk of their soldiers. The majority of that time focused on basic rifle marksmanship and individual soldier discipline. This also demonstrated that the success of this division resulted from how they completed their training once in France. ⁷⁵

The post-war statistical analysis of the Eighty-Ninth Division's actions demonstrated the level of success the division had during its time in combat. The Eighty-Ninth captured over 5,000 German Prisoners of War (POW), which placed it third in the number captured for all divisions. This is especially remarkable when compared to the National Guard divisions, which only averaged 1,310 captured POWs. In terms of casualty numbers, the Eighty-Ninth was higher than the average for National Army divisions, but also served on an active front for longer than most of the other like-divisions. Their casualty numbers were also significantly less than what National Guard or Regular Army divisions sustained, but this most likely reflects the differences in time on an active front.⁷⁶

The Eighty-Ninth Division's performance during the Battles of St. Mihiel was also unique in that they were one of the only divisions operating in the trenches for a long period

⁷⁴ "Report of G-5, Appendix 3 History of the Army General Staff College;" *Annual Report of the Commandant of the School of Infantry and Cavalry*, (Fort Leavenworth, KS: 1890). Colonel Charles E. Kilbourne, the first Chief of Staff for the Eighty-Ninth, does not have a record of attending any of the school at Leavenworth. He was a Medal of Honor recipient for his actions during the Philippines' Insurrection in 1899; http://www.history.army.mil/html/moh/philippine.html (accessed July 28, 2012).

⁷⁵ English, *History of the Eighty-Ninth*, 38.

⁷⁶ See Appendix D for comparison of division statistics.

before the offensive began. The other American divisions entered the line in the days immediately before the battle, while the Eighty-Ninth was completing their training and the AEF was concerned the Germans would learn of the attack if the Eighty-Ninth rotated out at an unusual time. The division's stellar performance once the operation began, followed by their extended period in the trenches following the offensive also demonstrates a capability not displayed by other National Army Division.⁷⁷

Since the Eighty-Ninth Division spent less time in combat compared to the Second Division, the improvement in their orders is difficult to discern. The Eighty-Ninth's order for both the attacks at St. Mihiel and in the Meuse –Argonne demonstrated a high degree of coordination among the different combat arms, especially the synchronization of artillery and engineer support. These orders also established the amount of standardization among division orders, as the Eighty-Ninth Division's orders follow the same format as the Second Division's orders, though in St. Mihiel these two divisions fought for different corps headquarters. ⁷⁸

Despite a lack of Fort Leavenworth trained officers, the Eighty-Ninth still demonstrated that they had the capability to conduct complex operations across time and space to reach their higher commander's desired objectives. The division had difficult missions during the St. Mihiel and Meuse-Argonne campaigns, but through the work of the staff and efforts of the subordinate units, the unit synchronized its actions and contributed to the defeat of the Imperial German Army.

⁷⁷ English, *History of the Eighty-Ninth*, 112-115.

⁷⁸ Ibid., 331-384.

Chapter 5

Conclusions

American combat divisions were in battle for 200 days, from the 25th of April, 1918, when the first Regular division after long training in quiet sectors, entered an active sector on the Picardy front, until the signing of the armistice. During these 200 days they were engaged in 13 major operations, of which 11 were joint enterprises with the French, British, and Italians, and 2 were distinctively American.

— Leonard P. Ayres, *The War with Germany*

Conclusions

The American division staffs underwent significant improvement during the course of the Great War. Despite only serving in active combat for 200 days, the American units rapidly improved their ability to synchronize actions in time, space, and purpose to meet their higher headquarters objectives. The divisions accomplished this through a combination of standardizing staff organization, educating staff officers either at Fort Leavenworth before the war or sending officers to the Army General Staff College in Langres, France, and developing the necessary staff officer capabilities by undergoing the crucible of combat.

By establishing a standardized staff organization, the AEF could then develop manuals and codify procedures, such as the 1917 Staff Manuel, to assist units with maintaining uniform procedures. This also manifested itself in common organization for field orders and communication plans to ensure divisions that within the AEF could communicate with a common language. By using a standard organization, there was a common expectation of job requirements at whichever staff assignment one received. In addition, this also ensured staff personnel from other organizations had a basic understanding for American units operating on their flanks.

The development of a staff education program in France, at the Army General Staff

College in Langres, allowed the AEF to educate a select number of division staff officers for each division. This helped to augment the number of Fort Leavenworth trained staff officers from

before the war, and continued this process of orders and communications standardization. The AGSC in Langres was a difficult course, demonstrated by its high failure rate compared to Fort Leavenworth's Army Staff College both before and after the war. This course of study was also relevant to the problems facing these division staff officers once they returned to their units. By developing a curriculum that mirrored the course work from Fort Leavenworth, but allowed a rapid through put of officers, the AEF was able to meet its requirements for trained staff officers during the war.

The third aspect of training division staff officers required the application of their education as the AEF's divisions conducted combat operations. By having a sufficient number of staff college graduates within each division, these officers could provide guidance and mentorship to the other staff officers as they developed the practical knowledge to conduct complex operations. The American forces rapidly improved their capabilities, though this produced a high casualty rate for the initial divisions arriving to the front. The Second Division provides one of the best examples of this growth when comparing the complexity of their orders during the Battle of Belleau Wood in July 1918 with their later orders at St. Mihiel in September.

The American Expeditionary Force best demonstrated its acquired capabilities by their actions transitioning from the Battle of St. Mihiel to conduct the attack at Meuse-Argonne. This transition required the American forces to halted offensive operations at St. Mihiel after four days, regardless of what objectives they captured, and then move off the line, face in another direction, and attack against some of the most defensible terrain on the Western Front. Then-Colonel Marshall best summed up the problem facing the American planners:

The concentration involved the movement of approximately five hundred thousand (500,000) men and over two thousand (2,000) guns, not to mention nine hundred thousand (900,000) tons of supplies and ammunition. The bulk of the troops and guns had to be withdrawn from the south face of the salient, moved westward into the zone of the Second French Army, which was to control the Meuse-Argonne front until four days before the battle. In general, but three roads were available for the movement. When one realizes that the seventy-two (72) guns of a division occupy fifteen (15) kilometers of

road space, an idea can be gained of the problem involved in the movement of two thousand (2,000).⁷⁹

Accomplishing this monumental task required staff from the AEF through division level staffs having a common language and understanding for accomplishing this mission. If even one of the divisions chose to operate its planning process in a different way, it could have significant rippling effects through the entire formation. The American forces did suffer high casualties during this attack, but the proportion of casualties compared to other similar Allied operations was much less, especially compared to other large-scale offensives such as the Battles of Verdun and the Somme. The American forces adapted to the type of war they faced in France quickly, and this required a standardized staff structure, the development of a formal education process, and placement of trained staff officers to train less experienced staff members. ⁸⁰

The American forces quickly transformed from a small, regional force into a large, modern army able to defeat the best divisions the Imperial German Army sent against them.

When compared to the other Allied countries, the American Forces had to develop rapidly the skills necessary to prevent their amalgamation into either French or British formations. The Americans accomplished this and by the implementation of the Armistice on November 11, 1918, they controlled a larger portion of the Western Front then the British Expeditionary Forces. This transformation unfortunately also came at a high cost, but still less when compared to the other Allied Countries. The American forces entered the war unprepared, but underwent a remarkable transformation in an incredibly short period. 81

⁷⁹ Marshall, Memoirs of My Service in the World War, 149.

⁸⁰ The Battle of Meuse-Argonne produced 120,000 American casualties; the Battle of Verdun produced 377,321 casualties and the Battle of the Somme produced 614,000 casualties. Ayres, *The War with Germany*, 112; Hew Strachan, *The First World War* (New York: Penguin Books, 2003), 188 and 195.

⁸¹ Ayres, *The War With Germany*, 139; though the U.S. suffered 50,000 soldiers killed during this war, it pales in comparison to the 900,000 killed in the British Army, or the 1,385,000 killed from the French Army.

Recommendations

It would be easy for one to believe the American experience in World War I had little relevance to the modern day. The odds definitely do not support a prediction that the United States Army would once again enter into trench warfare in Europe, but there are valuable lessons still that one can learn from the Great War. The most important lesson focuses on the question of how to rapidly expand the military force if the United States faced a near-peer, existential threat. If the U.S. Army had to expand quickly again, the lessons of World War I demonstrated a possible way of developing capable staff officers to ensure that division headquarters have the personnel to conduct complex, synchronized operations. The future is always uncertain, so by examining historical case studies, one may be able to develop understanding to adapt to the current problem.

If the U.S. Army had to expand rapidly, the development of a short staff course could help alleviate the need for educated staff officers. A staff college does not solve the problem of having capable staff officers, but does provide a way to develop a baseline of skills that can be refined during operations. One aspect of the Army General Staff College at Langres that stands out was its low graduation rate compared to the staff college at Fort Leavenworth. By maintaining a high standard, the officers entering the force after this training knew they had graduated a difficult course. Once commanders pair this education with real-world application in divisions, the division staffs had the capability to plan solutions for the complexity they faced.

The First World War was a war unlike anything before or after it, and set the stage for a number of technological advancements still relevant to the U.S. Army today. One of those advancements includes the expansion of the division staff and the realization that the execution of complex military operations requires a capable staff to synchronize and coordinate the actions. If

⁸² See Footnote 34 from Chapter 2 or Appendix A at the end of this monograph.

an existential threat presents itself to the United States, which requires a return to a large, conscript army, the force will need to grow staff officers rapidly.

The Second Division and Eighty-Ninth divisions demonstrated great success during their combat operations. This arose from their rapid adaption to the conditions in France, but also through the development of staff systems capable of assisting their commanders in understanding the complexity they faced. Both divisions demonstrated how even a small number of staff-trained officers had the ability to train other staff members and develop the skills necessary for success. Through their rapid exposure to the conditions of trench warfare, both divisions learned how to synchronize and integrate the combine arms efforts in their divisions and with their higher headquarters to defeat the Imperial German Army. Unfortunately, the peace that arose following the armistice on November 11, 1918 did not last, but the lessons of the Great War served to inform the future American leaders during the Second World War.

Appendix A

Historic Graduation Rates for U.S. Staff Colleges

Historic Graduation Rates from the Army's Staff Colleges									
Specific Course	Course Year	Total Attending	Total Graduates	Total Non- Graduates	Graduation Percentage	Notes			
School of Infantry and Cavalry	1904/1905	49	46	3 (3)	93.9%				
School of Infantry and Cavalry	1905/1906	58	53	5 (1)	91.4%				
School of Infantry and Cavalry	1906/1907	76	54	22 (1)	71.1%	19 Students pulled before graduation for service in Mexico			
School of the Line	1907/1908	45	42	3	93.3%				
Army Staff College	1907/1908	24	24	0	100.0%				
School of the Line	1908/1909	40	36	4 (1)	90.0%				
Army Staff College	1908/1909	23	23	0	100.0%				
School of the Line	1909/1910	39	36	3 (1)	92.3%				
Army Staff College	1909/1910	22	21	1	95.5%				
School of the Line	1910/1911	34	33	1	97.1%				
Army Staff College	1910/1911	22	19	2 (1)	86.4%				
School of the Line	1911/1912	47	46	1	97.9%				
Army Staff College	1911/1912	24	24	0	100.0%				
School of the Line	1912/1913	35	23	12	65.7%	12 Students pulled for detached service			
Army Staff College	1912/1913	24	12	12	50.0%	12 Students pulled for detached service			
School of the Line	1913/1914	43	43	0	100.0%	22 ordaenes panea for actaonea service			
Army Staff College	1913/1914	20	20	0	100.0%				
School of the Line	1914/1915	30	30	0	100.0%				
Army Staff College	1914/1915	22	22	0	100.0%				
School of the Line	1915/1916	34	31	3	91.2%	School Closes due to WWI National Emergency			
Army Staff College	1915/1916	27	23	4	85.2%	School Closes due to WWI National Emergency			
Army General Staff College, Langres France; First Course	11/28/1917 - 2/15/1918	75	42	33	56.0%				
Army General Staff College, Langres France; Second Course	3/4/1918 - 5/30/1918	166	144	22	86.7%				
Army General Staff College, Langres France; Third Course	6/17/1918 - 9/15/1918	250	153	97	61.2%				
Army General Staff College, Langres France; Fourth Course	10/7/1918 - 12/31/1918	316	195	121	61.7%				
School of the Line	1919/1920	99	91	8	91.9%	First Class after WWI			
General Staff School	1919/1920	53	49	4	92.5%				
School of the Line	1920/1921	94	93	1	98.9%				
General Staff School	1920/1921	56	55	1	98.2%				
School of the Line	1921/1922	209	194	15 (4)	92.8%				
General Staff School	1921/1922	75	75	0	100.0%				
Command and General Staff School	1922/1923	111	111	0	100.0%				
General Staff School	1922/1923	158	154	4	97.5%				
Command and General Staff School	1923/1924	253	251	2	99.2%				
Command and General Staff School	1924/1925	263	258	5	98.1%				
Command and General Staff School	1925/1926	248	245	3	98.8%				

Historic Graduation Rates for U.S. Staff Colleges.

Source: Compiled by author from Commandant, Army Service School Annual Reports, 1905 – 1926.

Appendix B

Second Division Casualties During the Great War

			June 1-5	June 6-9	June 10-15	June 16-23	June 24-30	July 1-4	July 5-16	Total
		Wounded	33	94	110	120	175	316	106	954
<u>.</u>	9th Infantry	Died of Wounds	4	8	2	14	7	16	5	56
ant		Killed	10	14	10	14	7	37	10	102
3 rd Infantry Brigade		Wounded	26	179	271	88	280	236	79	1159
3rd	23rd Infantry	Died of Wounds	2	21	24	15	14	20	2	98
m	,	Killed	5	107	17	12	13	54	1	209
		Wounded	119	647	637	149	176	4	4	1736
ō	5th Marines	Died of Wounds	0	0	0	0	0	0	0	0
arin		Killed	22	199	124	35	38	2	1	421
4th Marine Brigade		Wounded	179	510	878	65	74	19	5	1730
4th	6th Marines	Died of Wounds	0	0	0	0	0	0	0	0
		Killed	32	91	75	7	9	1	0	215
a		Wounded	6	6	21	13	18	0	2	66
gad	12th FA	Died of Wounds	0	0	1	2	0	1	0	4
Bri		Killed	0	2	2	2	3	0	0	9
2 nd Field Artillery Brigade		Wounded	3	2	1	12	14	2	4	38
₩	15th FA	Died of Wounds	0	0	3	0	0	1	0	4
ΨÞ		Killed	0	0	2	3	4	0	0	9
<u>.</u>	17th FA	Wounded	0	2	3	9	13	8	1	36
힡		Died of Wounds	0	1	0	2	0	2	0	5
2		Killed	0	0	0	2	1	0	0	3
, <u>o</u>	4th MG BN	Wounded	0	0	1	11	21	3	1	37
DIV		Died of Wounds	0	0	0	2	0	0	0	2
		Killed	0	0	0	1	5	0	0	6
z		Wounded	0	14	22	10	38	32	15	131
3rd IN BDE	5th MG BN	Died of Wounds	0	1	2	3	5	2	0	13
		Killed	0	6	4	1	2	5	1	19
4th MAR BDE		Wounded	41	30	64	29	3	0	0	167
h M# BDE	6th MG BN (Marines)	Died of Wounds	0	0	0	0	0	0	0	0
4t		Killed	4	4	16	4	0	0	1	29
_ &		Wounded	42	80	125	23	17	34	10	331
DIV	2d Engineers	Died of Wounds	3	7	11	2	2	4	1	30
		Killed	6	35	26	9	4	11	0	91
ا ہے ا		Wounded	13	24	30	10	31	30	4	142
DIV	Others	Died of Wounds	0	1	6	1	0	0	0	8
		Killed	4	1	8	1	1	1	0	16
	Total Casualties		554	2086	2496	671	975	841	253	7876
	Total Wou	ınded	462	1588	2163	539	860	684	231	6527
	Total Died of	Wounds	9	39	49	41	28	46	8	220
	Total Kil	lled	83	459	284	91	87	111	14	1129

Second Division Casualties from June 1 through July 16, 1918.

Source: Derived from American Battle Monuments Commission, Second Division Summary of Operations in the World War (Washington, DC: Government Printing Office, 1944), 23, modified by author.

			July 17	July 18-20	July 21-26	Total
		Wounded	1	924	16	941
± 4.	9th Infantry	Died of Wounds	2	48	3	53
fam	2-40 (20 H23) \$47 (54.0) \$40,000 \$40,000 \$10.00 \$10	Killed	0	272	1	273
3rd Infantry Brigade		Wounded	2	551	16	569
	23rd Infantry	Died of Wounds	0	39	8	47
		Killed	0	174	5	179
Sicross		Wounded	3	472	15	490
e .	5th Marines	Died of Wounds	0	0	0	0
larii ade	VILLANDON TO CONTROL NO.	Killed	1	37	6	44
4th Marine Brigade		Wounded	7	1049	7	1063
# #	6th Marines	Died of Wounds	3	0	0	3
		Killed	0	142	0	142
a		Wounded	0	23	88	111
gad	12th FA	Died of Wounds	0	0	4	4
Bri	A STANSON NEWSTRAND	Killed	0	0	9	9
ery		Wounded	0	11	24	35
Ē	15th FA	Died of Wounds	0	1	1	2
2nd Field Artillery Brigade	8	Killed	0	1	0	1
	17th FA	Wounded	0	14	18	32
		Died of Wounds	0	3	0	3
7	NON-MORANTO X	Killed	0	2	2	4
٩		Wounded	0	54	0	54
DIV Troop	4th MG BN	Died of Wounds	0	0	1	1
		Killed	0	3	0	3
Z		Wounded	0	19	1	20
2nd IN BDE	5th MG BN	Died of Wounds	0	0	0	0
2		Killed	0	0	0	0
AR		Wounded	0	78	1	79
4th MAR BDE	6th MG BN (Marines)	Died of Wounds	0	0	0	0
# _		Killed	0	10	1	11
. a		Wounded	0	129	4	133
DIV	2d Engineers	Died of Wounds	0	8	0	8
	3	Killed	0	28	0	28
۵		Wounded	0	35	5	40
DIV	Others	Died of Wounds	0	1	1	2
- F	Killed		0	7	1	8
	Total Casualties		19	4135	238	4392
	Total Wou	13	3359	195	3567	
	Total Died of	5	100	18	123	
	Total Kil	1	676	25	702	

Second Division Casualties from July 17 to 26, 1918.

Source: Derived from American Battle Monuments Commission, Second Division Summary of Operations in the World War (Washington, DC: Government Printing Office, 1944), 33, modified by author.

			Sept 8 - 11	Sept 12-16	Sept 17-19	Total
		Wounded	4	270	3	277
tr y	9th Infantry	Died of Wounds	1	28	0	29
3rd Infantry Brigade	The Control of Control	Killed	0	60	0	60
d In Brig		Wounded	11	202	0	213
310	23rd Infantry	Died of Wounds	0	19	0	19
	*	Killed	0	52	0	52
		Wounded	4	134	1	139
au 4	5th Marines	Died of Wounds	0	0	0	0
lari ade		Killed	0	17	0	17
4th Marine Brigade		Wounded	3	422	4	429
4t	6th Marines	Died of Wounds	0	0	0	0
		Killed	0	59	0	59
<u>a</u>		Wounded	0	9	0	9
gad	12th FA	Died of Wounds	0	0	0	0
Bri	X	Killed	0	5	0	5
2nd Field Artillery Brigade		Wounded	0	11	0	11
Ē	15th FA	Died of Wounds	0	1	0	1
ФA	ž.	Killed	0	0	0	0
E E	17th FA	Wounded	3	2	0	5
nd l		Died of Wounds	1	0	0	1
7		Killed	0	1	0	1
p		Wounded	0	24	0	24
DIV Troop	4th MG BN	Died of Wounds	0	2	0	2
L		Killed	0	5	0	5
<u> </u>		Wounded	1	28	0	29
2nd IN BDE	5th MG BN	Died of Wounds	0	0	0	0
1-0.0-11		Killed	0	5	0	5
IAR :		Wounded	2	43	0	45
4th MAR BDE	6th MG BN (Marines)	Died of Wounds	0	0	0	0
4t	30.00	Killed	0	5	0	5
IV Pop		Wounded	0	18	0	18
DIV	2d Engineers	Died of Wounds	0	1	0	1
	8	Killed	0	3	0	3
Ē		Wounded	2	12	0	14
DIV Troop	Others	Died of Wounds	0	0	0	0
	Killed		2	7	0	9
	Total Casu	34	1445	8	1487	
	Total Wou	30	1175	8	1213	
	Total Died of	2	51	0	53	
	Total Kil	5005 NA	2	219	0	221

Second Division Casualties from September 8 to 19, 1918.

Source: Derived from American Battle Monuments Commission, Second Division Summary of Operations in the World War (Washington, DC: Government Printing Office, 1944), 48, modified by author.

			Sept 29 - Oct 1	Oct 2 - 10	Oct 11 - 14	Total
		Wounded	15	706	9	730
t t	9th Infantry	Died of Wounds	0	47	0	47
3rd Infantry Brigade		Killed	2	165	1	168
d In		Wounded	6	819	8	833
3.0	23rd Infantry	Died of Wounds	0	73	0	73
	*	Killed	0	184	1	185
		Wounded	6	1086	0	1092
e .	5th Marines	Died of Wounds	0	0	0	0
ade	***************************************	Killed	0	134	1	135
4th Marine Brigade		Wounded	1	796	4	801
4t	6th Marines	Died of Wounds	0	0	0	0
		Killed	0	129	2	131
<u>a</u>		Wounded	1	16	0	17
gad	12th FA	Died of Wounds	0	2	0	2
B.	2	Killed	0	2	0	2
ery		Wounded	1	43	0	44
₽ E	15th FA	Died of Wounds	0	5	0	5
2nd Field Artillery Brigade		Killed	0	7	0	7
ie.	17th FA	Wounded	0	26	0	26
둳		Died of Wounds	0	1	0	1
2	1100-1000 440 040 00 0	Killed	0	5	0	5
٩		Wounded	0	30	3	33
DIV	4th MG BN	Died of Wounds	0	4	0	4
-		Killed	0	8	0	8
Z		Wounded	1	88	2	91
2nd IN BDE	5th MG BN	Died of Wounds	0	11	0	11
7		Killed	0	20	0	20
AR :		Wounded	0	122	1	123
4th MAR BDE	6th MG BN (Marines)	Died of Wounds	0	0	0	0
41	0.000	Killed	0	26	0	26
		Wounded	3	74	0	77
DIV	2d Engineers	Died of Wounds	0	6	0	6
-		Killed	0	18	0	18
		Wounded	5	89	2	96
DIV	Others	Died of Wounds	2	4	0	6
-		Killed	1	8	0	9
	Total Casu	alties	44	4754	34	4832
	Total Wou	ınded	39	3895	29	3963
	Total Died of	Wounds	2	153	0	155
	Total Kil	Out of	3	706	5	714

Second Division Casualties from September 29 through October 14, 1918. Source: Derived from American Battle Monuments Commission, Second Division Summary of Operations in the World War (Washington, DC: Government Printing Office, 1944), 67, modified by author.

			Oct 20 - 31	Nov 1 - 2	Nov 3 - 9	Nov 10 - 11	Total
		Wounded	17	110	490	57	674
₹	9th Infantry	Died of Wounds	1	9	44	7	61
3rd Infantry Brigade		Killed	0	5	134	28	167
d In		Wounded	11	189	265	3	468
3.	23rd Infantry	Died of Wounds	0	20	29	0	49
	*	Killed	0	45	67	1	113
		Wounded	5	342	111	97	555
e a	5th Marines	Died of Wounds	0	0	0	0	0
lari		Killed	1	51	33	23	108
4th Marine Brigade		Wounded	85	403	63	28	579
4 _	6th Marines	Died of Wounds	0	0	0	0	0
	8	Killed	1	44	10	1	56
<u>e</u>		Wounded	0	11	5	3	19
gac	12th FA	Died of Wounds	0	1	0	0	1
.E		Killed	0	1	0	0	1
2nd Field Artillery Brigade	÷	Wounded	1	3	15	1	20
Ē	15th FA	Died of Wounds	0	0	1	0	1
φ		Killed	0	1	3	0	4
Fiel	17th FA	Wounded	1	1	2	6	10
<u> </u>		Died of Wounds	0	0	0	0	0
2		Killed	0	0	0	1	1
, <u>a</u>	4th MG BN	Wounded	4	4	12	0	20
DIV		Died of Wounds	0	0	0	0	0
-		Killed	0	0	1	0	1
롣		Wounded	9	28	52	8	97
2nd IN BDE	5th MG BN	Died of Wounds	0	3	11	0	14
200000		Killed	0	4	13	3	20
4th MAR BDE		Wounded	2	46	28	23	99
h MA	6th MG BN (Marines)	Died of Wounds	0	0	0	0	0
1 4		Killed	0	8	6	7	21
~ =		Wounded	3	37	8	19	67
DIV	2d Engineers	Died of Wounds	0	6	0	3	9
		Killed	0	7	2	7	16
_ =		Wounded	10	12	14	10	46
DIV	Others	Died of Wounds	1	1	2	3	7
		Killed	3	1	4	2	10
	Total Casualties		155	1393	1425	341	3314
	Total Wou	ınded	148	1186	1065	255	2654
	Total Died of	Wounds	2	40	87	13	142
	Total Kil	led	5	167	273	73	518

Second Division Casualties from October 20 through November 11, 1918. Source: Derived from American Battle Monuments Commission, Second Division Summary of Operations in the World War (Washington, DC: Government Printing Office, 1944), 96, modified by author.

Appendix C

Eighty-Ninth Division Casualties During the Great War

			Aug 4 - Sept		Sept 17 -	
			11	Sept 12 - 16	Oct 11	Total
_		Wounded	51	195	178	424
l tr	353rd Infantry	Died of Wounds	1	34	8	43
age	•	Killed	3	54	18	75
177th Infantry Brigade		Wounded	248	61	234	543
77.	354th Infantry	Died of Wounds	8	7	14	29
17	-	Killed	7	8	22	37
_		Wounded	289	197	83	569
£	355th Infantry	Died of Wounds	54	18	6	78
178th Infantry Brigade		Killed	5	48	7	60
# # F		Wounded	6	106	404	516
87.1	356th Infantry	Died of Wounds	0	11	16	27
		Killed	0	18	28	46
ge		Wounded	0	0	30	30
. <u>i</u> e	340th FA	Died of Wounds	0	0	2	2
-AB		Killed	0	0	5	5
<u>=</u>	341st FA	Wounded	0	0	7	7
Arti		Died of Wounds	0	0	1	1
흥		Killed	0	0	2	2
164th Field Artillery Brigade	342nd FA	Wounded	0	0	17	17
4		Died of Wounds	0	0	4	4
16		Killed	0	0	4	4
_ &		Wounded	1	5	33	39
DIV	340th MG	Died of Wounds	0	1	0	1
		Killed	0	4	0	4
177th IN BDE		Wounded	18	22	69	109
7th BDE	341st MG	Died of Wounds	0	2	1	3
17		Killed	2	2	7	11
178th IN BDE		Wounded	22	11	63	96
78th BDE	342nd MG	Died of Wounds	1	1	2	4
:1		Killed	0	0	1	1
> હ		Wounded	17	18	61	96
DIV	314th Engineers	Died of Wounds	0	4	3	7
		Killed	0	4	3	7
> 8		Wounded	20	1	79	100
DIV	Others	Died of Wounds	4	0	2	6
	Killed		0	1	5	6
	Total Cas		757	833	1419	3009
	Total Wo		672	616	1258	2546
	Total Died o		68	78	59	205
	Total K	illed	17	139	102	258

Eighty-Ninth Division Casualties from August 4 through October 11, 1918 *Source:* Derived from American Battle Monuments Commission, *Eighty-Ninth Division Summary of Operations in the World War* (Washington, DC: Government Printing Office, 1944), 20, modified by author.

			Oct 12 - 19	Oct 20 - 31	Nov 1-2	Nov 3 - 9	Nov 10 - 11	Total
>		Wounded	19	312	220	102	2	655
ntr e	353rd Infantry	Died of Wounds	0	28	18	21	0	67
nfa jade		Killed	0	72	56	37	1	166
177th Infantry Brigade		Wounded	8	420	320	43	24	815
177	354th Infantry	Died of Wounds	0	23	32	8	5	68
812459		Killed	1	55	108	21	8	193
×		Wounded	7	138	35	315	24	519
ıntr	355th Infantry	Died of Wounds	0	22	2	31	1	56
Infa ;ade	3	Killed	0	27	7	93	6	133
178th Infantry Brigade		Wounded	9	84	39	193	144	469
178	356th Infantry	Died of Wounds	1	4	2	15	16	38
CVLHSX		Killed	1	17	8	57	66	149
, d	340th MG	Wounded	1	23	7	9	4	44
DIV		Died of Wounds	0	2	0	1	2	5
-		Killed	0	0	0	1	0	1
<u>z</u>	341st MG	Wounded	1	88	36	16	2	143
177th IN BDE		Died of Wounds	0	7	5	3	0	15
111 200.00		Killed	0	11	10	1	0	22
178th IN BDE	342nd MG	Wounded	0	15	23	31	14	83
8th BDE		Died of Wounds	0	3	8	4	1	16
17		Killed	0	2	11	3	3	19
, <u>a</u>		Wounded	0	47	26	17	0	90
DIV	314th Engineers	Died of Wounds	0	6	2	2	0	10
		Killed	0	6	7	1	0	14
_ <u>α</u>		Wounded	82	49	16	25	2	174
DIV	Others	Died of Wounds	0	4	0	4	2	10
I	Killed		1	8	3	9	0	21
	Total Cas	ualties	131	1473	1001	1063	327	3995
	Total Wounded		127	1176	722	751	216	2992
	Total Died o	f Wounds	1	99	69	89	27	285
	Total K	illed	3	198	210	223	84	718

Eighty-Ninth Division Casualties from October 12 through November 11, 1918 *Source:* Derived from American Battle Monuments Commission, *Eighty-Ninth Division Summary of Operations in the World War* (Washington, DC: Government Printing Office, 1944), 44, modified by author.

Appendix D

Comparison of Divisions From the Great War

	Performance of WWI Divisions									
			Number of German	Days on an Active	Kilometers of					
Division	Type of Formation	Casualties Sustained	POWs captured	Front	Ground Seized					
1st	Regular Army	21,612	6,469	93	51					
2nd	Regular Army	22,230	12,026	66	60					
3rd	Regular Army	16,117	2,240	86	41					
4th	Regular Army	12,504	2,756	38	25					
5th	Regular Army	8,840	2,356	32	29					
6th	Regular Army	546	12	0	0					
7th	Regular Army	1,693	69	2	1					
26th	National Guard	13,460	3,148	45	37					
27th	National Guard	8,986	2,357	57	11					
28th	National Guard	13,980	921	49	10					
29th	National Guard	5,219	2,187	23	7					
30th	National Guard	8,954	3,448	56	30					
32nd	National Guard	13,392	2,153	35	36					
33rd	National Guard	7,255	3,987	27	36					
35th	National Guard	7,283	781	5	13					
36th	National Guard	2,528	549	23	21					
37th	National Guard	5,243	1,495	11	30					
42nd	National Guard	13,919	1,317	39	55					
77th	National Army	10,497	750	66	72					
78th	National Army	7,253	432	21	21					
79th	National Army	6,750	1,077	17	20					
80th	National Army	6,132	1,813	17	38					
81st	National Army	1,224	101	0	6					
82nd	National Army	7,546	845	27	17					
88th	National Army	118	3	0	0					
89th	National Army	7,291	5,061	28	48					
90th	National Army	7,277	1,876	26	29					
91st	National Army	5,778	2,412	14	34					
92nd	National Army (Colored)	1,642	38	2	8					

Comparison of World War I Divisions

Source: Derived from Leonard Ayres, *The War with Germany: World War I, A Statistical Summary* (1919, reprint, Canal Winchester, OH: Badgley Publishing, 2009), 113-117, modified by author.

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